

REMARKS

By this amendment, the drawings and claims 1, 5, 7, 9–11, 13, 14, 22 – 24, 26 and 30 are amended, claims 2, 3, 15, 16, 19 – 21, 25, 29 and 31 – 35 are hereby canceled, and new claims 36 – 46 are hereby presented. Claims 1, 5–7, 9–11, 13, 14, 22 – 24, 26, 30 and 36 – 46 [27 total claims, 2 independent, no multiple dependent claim, no claims fees due] are pending in the application. Further examination of the application, as amended, and favorable reconsideration of the objections and rejections are respectfully requested.

The drawings submitted on or about August 3, 2011, were objected to as allegedly presenting new matter. Applicant does not agree but nevertheless submits new replacement drawings showing more generic versions of the filter and nozzle elements in Fig. 1 solely to advance the prosecution. Although there was no specific objection to the generic actuator shown in Fig. 6, it is not clear that it was entered or not since the objection to the corresponding claim terminology was maintained, and thus Fig. 6 is re-submitted herewith without further changes. No new matter is presented.

Support for “A hydrocarbon well-test flare nozzle... adapted for forming a solid wall of fluid around a flare in a hydrocarbon well-test operation” and “to permit fluid to leave the nozzle as a solid wall of fluid” in claim 1, is found in the specification, among other places, at page 1, line 22 to page 2, line 14; and page 3, lines 1 to 2, with reference to the pages and

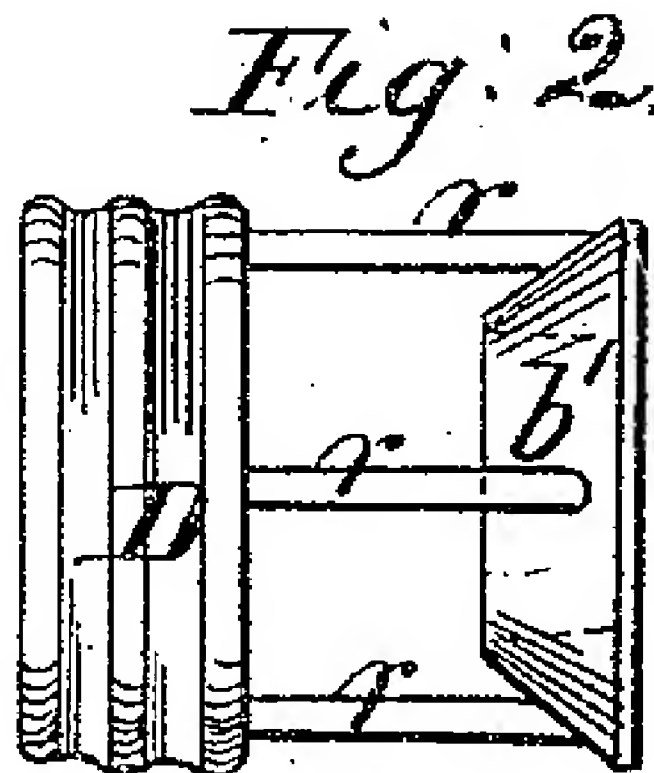
line numbers in the original specification as published under WO 2005/084815.

Support for "a fluid deflector having a deflecting surface which extends beyond an outer width of the body" in claim 1, is found at page 3, lines 14 to 18 ("Fluid flowing along the channel may impinge upon the fluid deflector and may travel along a surface of the deflector and out of the nozzle, the direction of flow of the fluid as it leaves the nozzle thereby determined by the deflector"); page 3, lines 27 – 29 ("the fluid deflector and the body of the nozzle together define a width of the channel at or near said downstream end"); page 7, lines 1 to 3 ("the frustro-conical deflecting surface extends beyond the maximum width of the channel to direct the flow of fluid"); and the Figures.

Support for "wherein the fluid deflector is arranged at or near the downstream end of the channel such that the fluid deflector and the body together define circumferentially continuous outlet to permit fluid to leave the nozzle as a solid wall fluid" in claim 1, is clear from at least page 1, line 22 to page 2, line 14; page 3, lines 1 to 2; page 10, lines 21 – 22; page 16, lines 18 – 24; page 13, lines 5 to 14; and the Figures wherein an object of the invention is to provide a solid wall of water and therefor the outlet must, therefore, be circumferentially continuous e.g. annular. No new matter is presented.

Rejection under 102 – US 89456 (Allen) alone– claims 1, 9–11, 26

Claims 1, 9–11, 26 were rejected as anticipated by US 89456 (Allen). The rejection is traversed. Allen fails to disclose or suggest a fluid deflector which is "arranged at or near a downstream end of the channel such that the fluid deflector and the body together define circumferentially continuous outlet to permit fluid to leave the nozzle as a solid wall of fluid" as claimed in claim 1 as amended. In contrast, Allen discloses that fluid leaves the nozzle as a plurality of circumferentially discrete, discontinuous fluid streams defined between the rods *r* of a collar *D* of the nozzle shown most clearly in Figure 2 of Allen:



Allen thus fails to teach every element of the invention as recited in claims 1 and 26. Allen relates to nozzles for extinguishing fires and, in particular, is directed towards the production of a "widely-spreading spray stream" (see the object of the invention described at column 1, lines 18 – 25). Allen does not teach or suggest a nozzle suitable for forming a solid wall of fluid around a flare in a hydrocarbon well-test operation.

Rejection under 102 – US 2323464 (Glessner) alone– claims 4–7, 15–16, 22, 24–25, 29–33

Claims 4–7, 15–16, 22, 24–25, 29–33 were rejected as anticipated by US 2323464 (Glessner). The rejection is moot in view of the amendment canceling the independent claims and amending the dependent claims to depend on or through claim 1, which was not rejected over Glessner. In any event, Glessner fails to disclose a "fluid deflector having a deflecting surface which extends beyond an outer width of the body" as recited in claim 1. Instead, Glessner discloses a nozzle having a baffle 20 which has a deflecting surface which fails to extend beyond an outer width of the body 10 and/or an outer width of the sleeve 12. Furthermore, the baffle 20 of Glessner has a peripheral edge comprising teeth which are provided to disrupt the spray and subdivide drops passing through the port 22 and, as such, Glessner fails to disclose a fluid deflector which is "arranged at or near a downstream end of the channel such that the fluid deflector and the body together define circumferentially continuous outlet to permit fluid to leave the nozzle as a solid wall of fluid" as recited in claim 1.

Glessner relates to "nozzles for fire fighting equipment and more specifically to nozzles of the so-called fog or vapour type" (see column 1, lines 1 – 3 and the object of the invention at column 1, lines 4 – 10), and fails to teach or suggest a nozzle suitable for forming a solid wall of fluid around a flare in a hydrocarbon well-test operation.

Rejection under 103 – Allen/US 1628823 (Chester)/US PG-Pub 2004/0028476 (Payne) – claim 13

Claim 13 has been amended to depend on or through claim 1, as discussed above. Chester and Payne are cited solely for the alleged

disclosure of a flow rate sensor and an actuation mechanism, respectively and thus fail to bridge the gap from Allen to the invention of claim 1 as noted above.

Chester relates to a self-flushing atomising nozzle for use in an air-conditioning apparatus (see column 1, lines 1 – 14). Payne fails to disclose a nozzle of any kind and, in particular, Payne fails to disclose a nozzle having any of the features of claim 1. It is clear that Payne has only been cited against claim 13 because Payne discloses various fluid control sensors and fluid control circuitry which operate to control the flow of fluid from a generic fluid dispensing system. As such, Payne completely fails to teach or suggest a nozzle having any of the features of the nozzle of claim 1. The disclosures of Allen, Chester and Payne relate to completely different fields relative to the nozzle of claim 1 and none of Allen, Chester and Payne when taken alone or in any combination in any way suggest all of the features of the nozzle of claim 1, particularly wherein the fluid deflector is "arranged at or near the downstream end of the channel such that the fluid deflector in the body together define a circumferentially continuous outlet to permit fluid to leave the nozzle as a solid wall fluid."

Rejection under 103 – Glessner/Payne – claims 18–21

Claims 18–21 have been canceled; the rejection is moot. Furthermore, Glessner and Payne are discussed above and for the reasons noted do not teach or suggest the invention claimed herein.

Rejection under 103 – Glessner/US 163101 (Orr) – claim 23

Claim 23 has been amended to depend on or through claim 1, and the rejection is moot. Furthermore, the shortcomings of Glessner with respect to claim 1 are as discussed above. Orr is cited solely for the alleged disclosure of a threaded connection and thus fails to overcome the deficiencies of Glessner. Orr fails to disclose or suggest a "fluid deflector having a deflecting surface which extends beyond an outer width of the body," or a fluid deflector which is "arranged at or near a downstream end of the channel such that the fluid deflector and the body together define a circumferentially continuous outlet to permit fluid to leave the nozzle as a solid wall of fluid." Instead, Orr discloses an automatic water distributor or sprinkler system for extinguishing fires in a building.

Rejection under 103 – Glessner/Chester/Payne – claim 29

Claim 29 has been canceled; the rejection is moot. Furthermore, Glessner, Chester and Payne are discussed above and for the reasons noted do not teach or suggest the invention claimed herein.

Conclusion

Accordingly, it is respectfully submitted the application is in condition for allowance. Reconsideration of the application, as amended, and withdrawal of the objections and rejections are respectfully requested.

If any issues remain that are appropriate for resolution by telephone interview, please contact undersigned counsel.

The Office is authorized to charge deposit account 501285 for any fees due in connection with this communication, or to refund any overpayment.

Respectfully submitted,

/Daniel N. Lundeen/
Daniel N. Lundeen
Reg. No. 31,177
Lundeen & Lundeen, PLLC
2710 Louisiana Street
Houston, Texas 77006
(713) 652-2555
(713) 652-2556 Fax
Email dan@LPATS.com
ATTORNEY FOR APPLICANT